

**REMARKS**

In the present response, claims 27-29, 35, 36, 41, 59, 60, 62, and 63 are amended, no claims are cancelled, and claims 74-114 are added. Therefore, claims 27-30 and 32-114 are pending in the application with claims 27-29 and 74 being independent.

***Explanation and Support for Amendment***

By this amendment, Applicant amends claims 27-29, 35, 36, 41, 59, 60, 62, and 63. At the suggestion of the Examiner, Applicant also adds claims 74-114 to recite a hairstyling composition.

Applicant submits that each of the foregoing amendments is fully supported by the specification. For the convenience of the Office, specific examples of support are noted below:

Support for the amendment to claims 27-29 to recite that "the at least one polycondensate (A) is different from the at least one film-forming polymer (B)" is found, e.g., at page 3, lines 18-20, of the present application.

New composition claims 74-114 find support in at least device claims 29-59, 62, 63, and 65-73.

Applicant submits that no new matter has been added by the amendments and no estoppels are intended thereby.

***Interview Summary***

Applicant would initially like to thank Examiner Wells and her supervisor, Examiner Padmanabhan, for meeting with Applicant's representatives on November 19, 2002. During the interview, Applicant's representatives proposed amendments for the

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Examiners' consideration. As discussed in more detail below, Applicant's representatives argued that the cited documents fail to disclose or suggest at least one polycondensate (A), at least one film-forming polymer (B) different from polycondensate (A), and a device being chosen so as to obtain droplets of the hair composition having an average diameter of less than or equal to 80  $\mu\text{m}$  upon dispensing.

***Response to Election of Species Requirement***

Claims 32-38, 42, 46-57, 59, and 70-73 are withdrawn from consideration as being directed to non-elected subject matter. During the interview, Examiner Wells conceded that many of these claims should have been examined.

For the convenience of the Office, Applicant sets forth below the argument against the Election of Species Requirement that appeared in the Amendment After Final filed October 28, 2002:

Contrary to the assertions of the Office, Applicant respectfully submits that claims 32-35, 46, 48, 70, 71, and 73 read on the elected subject matter, as discussed in more detail below, and thus should be examined.

In maintaining the Restriction Requirement, the Office asserts that:

For the polycondensate, Applicant elected formula (I'), wherein X' is O and R is C1-C20 cycloaliphatic radical. In Applicant's Response to Election of Species Requirement, no mention was made of polycondensates comprising compounds containing two active hydrogen atoms, substances comprising a diol containing an acid radical, isocyanates, or silicone compounds. Regarding the film-forming polymer, Applicant elected grafted silicone polymers comprising a polysilicone portion and a non-silicone organic chain portion. Claims 46-48 make no mention of grafted silicone polymers.

Final Office Action at page 2.

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In response, Applicant respectfully submits that it appears that the Office has not appreciated how the elected species relates to the disclosed formulas. In the August 16, 2001 Preliminary Amendment and Response to Election of Species Requirement, Applicant elected:

as the polycondensate (A), lactic acid/ethylene glycol P (MIS - EG) - dimethylolpropanoic acid (DMPA) - isophorone diisocyanate polyester polycondensate; and

as the film-forming polymer (B), polydimethyl/methylsiloxane containing propylthio-3-methacrylate groups/methacrylate/methacrylic acid.

Both of the elected polycondensate (A) and film-forming polymer (B) are disclosed in the Example on page 37 of the present specification.

In response to this election, the Office asserted that "if a formula is to be elected for the block chosen from polyurethane and polyurea blocks, that Applicant define all variables of the formula." Paper mailed September 24, 2001.

In the October 24, 2001 Response to Election of Species Requirement, Applicant essentially re-elected the same species as previously elected in the paper filed August 16, 2001. In particular, Applicant elected as the polycondensate (A), formula (I') wherein X' is O; and R is C<sub>1</sub> to C<sub>20</sub> cycloaliphatic radicals. As the film-forming polymer (B), Applicant elected grafted silicone polymers comprising a polysiloxane portion and a non-silicone organic chain portion. The October 24, 2001 Election indicated that these species correspond to the Example on page 37 of the specification.

Thus, contrary to the suggestions of the Office, the above-elected species of the Example on page 37 includes a polycondensate that reads on withdrawn claims 32-35,

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70, and 71. In particular, the elected polycondensate may be formed from compounds containing:

- (1) two active hydrogen atoms per molecule, e.g., from reaction of lactic acid and ethylene glycol, (see page 7, lines 1-8 of present application);
- (2) a substance comprising a diol containing an acid radical, e.g., DMPA, (see page 7, lines 9-11); and
- (3) an isocyanate, e.g., isophorone diisocyanate.

In view of the above, it is clear that the elected polycondensate includes aspects presently excluded by the Examiner. In particular, Applicant submits that at least withdrawn claims 32-35, 70, and 71 read on the elected polycondensate.

In addition, Applicant notes that the elected film-forming polymer includes aspects presently withdrawn by the Examiner. In particular, Applicant submits that withdrawn claims 46, 48, and 73 read on the elected polydimethyl/methylsiloxane containing propylthio-3-methacrylate groups/methacrylate/methacrylic acid, at least because methacrylic acid reads on formula (II) of claim 46.

Thus, Applicant respectfully submits that withdrawn claims 32-35, 46, 48, 70, 71, and 73 read on the elected subject matter and should be examined.

***Response to § 112 Rejection***

The rejection of claim 41 under 35 U.S.C. § 112, second paragraph, as being indefinite, has been maintained. Although Applicant disagrees with the rejection, in order to advance prosecution, claim 41 has been amended to even more clearly recite the present invention and to eliminate the language objected to by the Office. During

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the interview, Examiner Wells indicated that this amendment would overcome the 35 U.S.C. § 112, second paragraph, rejection.

In view of the above, Applicant respectfully requests that this ground of rejection be withdrawn.

***Response to § 103 Rejection***

The rejection of claims 27-30, 39-41, 43-45, 58, and 60-69 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,166,093 to *Mougin et al.* ("*Mougin '093*"), U.S. Patent No. 5,643,581 ("*Mougin '581*"), or EP 0 751 162 ("*Mondet*") in view of U.S. Patent No. 5,653,963 to *Beitone et al.*, has been maintained by the Office. In addition to the reasons set forth in previous Office Actions, the Office argues that *Beitone* discloses a film-forming polymer. Advisory Action at 2. The Office also cites *In re Rose*, 105 USPQ 237 (CCPA 1955), for the proposition that particle size is not patentable without unobvious results. *Id.* The Office further asserts that the data showing surprising results is not commensurate in scope with the claims and not comparative with the closest art. *Id.* Applicant respectfully traverses this rejection for the reasons of record and those which follow.

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. See M.P.E.P. § 2143. Furthermore, the teaching or suggestion to make the claimed combination and the reasonable

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expectation of success must both be found in the prior art, not in Applicant's disclosure. See *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

The Federal Circuit has emphasized the Examiner's high burden for establishing a *prima facie* case of obviousness and the requirement for specificity in the evidence necessary to support a *prima facie* case. For example, in *In re Lee*, the Federal Circuit held that "[t]he factual inquiry whether to combine references must be thorough and searching. It must be based on objective evidence of record. This precedent has been reinforced in myriad decisions, and cannot be dispensed with." 277 F.3d 1338, 1433 (Fed. Cir. 2002). See also *In re Dembiczak*, 50 USPQ2d 1614 (Fed. Cir. 1999) (requiring a "clear and particular" suggestion to combine prior art references).

In the present case, independent claims 27-29 recite at least one polycondensate (A), at least one film-forming polymer (B), and a device being chosen so as to obtain droplets of a hair composition having an average diameter of less than or equal to 80  $\mu\text{m}$  upon dispensing. Independent claims 27-29 also recite that the at least one polycondensate (A) is different from the at least one film-forming polymer (B).

#### ***No Motivation to Combine Teachings of Cited Documents***

Applicant respectfully submits that there would have been insufficient motivation to combine the teachings of the cited documents in the manner envisioned by the Office. Applicant notes that the Office has failed to provide any statement of motivation for adding the film-forming polymer of *Beitone* to the compositions of the primary documents.

Moreover, Applicant submits that there would have been insufficient motivation to add the film-forming polymer of *Beitone* to any of the compositions of the primary

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documents. In this regard, Applicant notes that the teachings of *Beitone* are limited to a specific composition. *Beitone* teaches that its composition consists of water, alcoholic phase, and dimethylether in "specifically determined proportions." Col. 1, lines 45-55. In particular, *Beitone* requires 49 to 78 wt% of dimethylether. Col. 1, line 59. In contrast, the compositions of the primary documents may include other ingredients and do not appear to include dimethylether. In view of *Beitone*'s specific requirement of a composition consisting of water, alcoholic phase, and 49 to 78 wt% of dimethylether, there would have been no motivation to combine the teachings of *Beitone* with the apparently dimethylether-free teachings of the primary documents.

Another reason why there would have been insufficient motivation to add the film-forming polymer of *Beitone* to the compositions of the primary documents is that the primary documents appear to teach compositions that already have film-forming polymers. The film-forming polymers of the primary documents are discussed, e.g., at col. 2, lines 29-40, of *Mougin* '093; and col. 2, lines 20-26, of *Mougin* '581. Since the compositions of the primary documents appear to already include film-forming polymers, there would have been no motivation to add another film-forming polymer. Therefore, there would have been insufficient motivation to add the film-forming polymer of *Beitone* to any of the compositions of the primary documents.

### ***No Reasonable Expection of Success***

Further, there would have been no reasonable expectation that the teachings of the cited documents could be successfully combined. In this regard, *Mougin* '093 teaches (col. 1, lines 55-58):

It is therefore difficult simply by mixing film-forming polymers and silicones in one formulation to obtain, simultaneously,

good compatibility of the constituents and an additive effect of their properties.

Accordingly, *Mougin* '093 teaches that combining film-forming polymers and silicones may result in compatibility problems. Furthermore, as noted above, the primary documents do not appear to include dimethylether in their compositions, whereas *Beitone* specifically requires a composition consisting of water, alcoholic phase, and 49 to 78 wt% of dimethylether. In view of these reasons, there would have been no reasonable expectation that the film-forming polymer of *Beitone* could be successfully combined with the silicone-containing compositions of the primary documents.

***Cited Documents Fail to Disclose or Suggest Recited Droplet Size***

In addition, the cited documents fail to disclose or suggest that at least one polycondensate (A), at least one film-forming polymer (B), and a device are chosen so as to obtain droplets of a hair composition having an average diameter of less than or equal to 80  $\mu\text{m}$  upon dispensing. The Office previously asserted that "[d]roplet sizes of the composition are disclosed as ranging from 5 to 400 nanometers . . . ." December 5, 2001 Office Action at page 6. Contrary to the suggestions of the Office, as discussed during the interview, this disclosure of *Mougin* '093 and *Mougin* '581 is directed to the size of particles forming the pseudolatex as opposed to the droplet size of a hair composition as claimed. See *Mougin* '093 at col. 14, lines 1-5; *Mougin* '581 at col. 10, lines 15-18; and claims 26-27. Thus, the cited documents fail to teach or suggest that at least one polycondensate (A), at least one film-forming polymer (B), and a device are chosen so as to obtain droplets of a hair composition having an average diameter of less than or equal to 80  $\mu\text{m}$  upon dispensing.

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As noted above, the Office cited *In re Rose*, 105 USPQ 237 (CCPA 1955), for the proposition that particle size is not patentable without unobvious results. *In re Rose* is distinguishable because it is directed to stacks of lumber of different sizes, whereas the present case involves an interaction of two polymers with a device to form small droplets. See, e.g., *id.* at 238. Furthermore, the results of the present invention are surprising as discussed below.

***The Results of the Invention are Unexpected***

Assuming for the sake of argument only, that the Office did establish a prima facie case of obviousness, it has been overcome by the unexpected results of the present invention. Contrary to the assertions of the Office, the present invention not only describes surprising results, but also includes data clearly demonstrating such results. See present application at page 3, lines 5-11 and pages 37-39. Applicant respectfully submits that this data is reasonably commensurate in scope with the claims and shows a trend. Applicant also submits that the Comparative Examples of the present application are closer than the cited documents at least because the cited documents fail to mention droplet size and the cited documents fail to disclose a composition comprising at least one polycondensate (A) comprising at least one block chosen from polyurethane and polyurea blocks and at least one film-forming polymer (B), wherein the at least one polycondensate (A) is different from the at least one film-forming polymer (B). The cited documents relied on by the Office simply do not suggest the present invention or the results of the present invention.

In view of the above, Applicant respectfully requests that this ground of rejection be withdrawn.

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***New Claims***

For the sake of completeness, Applicant notes that new composition claims 74-114 include the recitation of at least one polycondensate (A) comprising at least one block chosen from polyurethane and polyurea blocks; and at least one film-forming polymer (B), wherein the at least one polycondensate (A) is different from the at least one film-forming polymer (B). Applicant submits that these claims are allowable for at least reasons similar to those discussed above.

***Conclusion***

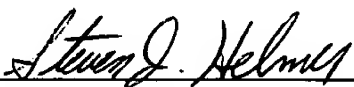
Applicant respectfully requests reconsideration of this application and the timely allowance of all pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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**APPENDIX**

27. (Amended) A process for shaping or holding a hairstyle, comprising:  
dispensing a hair composition using a dispenser device, said dispenser device  
comprising a reservoir containing said hair composition; wherein

(i) the composition comprises, in a cosmetically acceptable medium, at least one  
polycondensate (A) comprising at least one block chosen from polyurethane and  
polyurea blocks and at least one film-forming polymer (B), wherein the at least one  
polycondensate (A) is different from the at least one film-forming polymer (B); and

(ii) the at least one polycondensate (A), the at least one film-forming polymer (B),  
and the device being chosen so as to obtain [, on leaving the device,] droplets of said  
hair composition [with] having an average diameter of less than or equal to 80  $\mu\text{m}$  upon  
dispensing.

28. (Amended) A process for manufacturing a hairstyling product, the  
process comprising:

including a hair composition in a dispenser device, said dispenser device  
comprising a reservoir containing said hair composition; wherein

(i) the composition comprises, in a cosmetically acceptable medium, at least one  
polycondensate (A) comprising at least one block chosen from polyurethane and  
polyurea blocks and at least one film-forming polymer (B), wherein the at least one  
polycondensate (A) is different from the at least one film-forming polymer (B); and

(ii) the at least one polycondensate (A), the at least one film-forming polymer (B),  
and the device being chosen so as to obtain [, on leaving the device,] droplets of said

hair composition [with] having an average diameter of less than or equal to 80  $\mu\text{m}$  upon  
dispensing.

29. (Amended) A dispenser device comprising a reservoir containing a hair composition, wherein:

(i) the composition comprises, in a cosmetically acceptable medium, at least one polycondensate (A) comprising at least one block chosen from polyurethane and polyurea blocks and at least one film-forming polymer (B), wherein the at least one polycondensate (A) is different from the at least one film-forming polymer (B); and

(ii) the at least one polycondensate (A), the at least one film-forming polymer (B), and the device being chosen so as to obtain [, on leaving the device,] droplets of said hair composition [with] having an average diameter of less than or equal to 80  $\mu\text{m}$  upon  
dispensing.

35. (Amended) The device according to claim 32, wherein said at least one isocyanate (3) is chosen from hexamethylene diisocyanate, isophorone diisocyanate, toluylene diisocyanate, diphenylmethane 4,4'-diisocyanate, dicyclohexylmethane 4,4'-diisocyanate, methylenebis(p-phenyl) diisocyanate, methylenebis(4-cyclohexyl isocyanate), [isophorone diisocyanate,] toluene diisocyanate, 1,5-naphthalene diisocyanate, 4,4'-diphenylmethane diisocyanate, 2,2'-dimethyl-4,4'-diphenylmethane diisocyanate, 1,3-phenylene diisocyanate, 1,4-phenylene diisocyanate, mixtures of 2,4- and 2,6-toluene diisocyanate, 2,2'-dichloro-4,4'-diisocyanatodiphenylmethane, 2,4-

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dibromo-1,5-diisocyanatonaphthalene, butane 1,4-diisocyanate, 1,6-hexane diisocyanate and 1,4-cyclohexane diisocyanate.

36. (Twice Amended) The device according to claim 29, wherein the at least one polycondensate (A) is formed [form] from at least one additional compound having a silicone skeleton chosen [form] from polysiloxanes, polyalkylsiloxanes and polyarylsiloxanes.

41. (Twice Amended) The device according to claim 39, wherein the radical R is chosen from hexamethylene, 4,4'-biphenylenemethane, 2,4- and 2,6-tolylene, 1,5-naphthylene, p-phenylene, methylene-4,4-bis-cyclohexyl radicals and divalent radicals [derived from] of isophorone.

59. (Amended) The device according to claim 29, wherein the at least one film-forming polymer (B) is chosen from functionalized and non-functionalized, silicone and non-silicone polyurethanes[, said polyurethanes being different from said at least one polycondensate (A)].

60. (Amended) The device according to claim 29, wherein said device delivers an amount of composition ranging from 120 to [and] 170  $\mu$ l when the user presses once on the push-button.

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62. (Amended) The device according to claim 29, wherein the composition also contains at least one [conventional] cosmetic additive chosen from fatty substances, thickeners, softeners, antifoaming agents, moisturizers, antiperspirants, basifying agents, dyes, pigments, fragrances, preserving agents, surfactants, volatile and non-volatile silicones.

63. (Amended) The device according to claim 29, wherein the composition also contains at least one [conventional] cosmetic additive [is] chosen from anionic silicones, polyols, proteins and vitamins.

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